STATE OF UTAH								FORM 3							
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING											AMENDED RE	PORT			
APPLICATION FOR PERMIT TO DRILL									1	1. WELL NAME and NUMBER  Wellington Fee 44-22					
2. TYPE OF WORK  DRILL NEW WELL REENTER P&A WELL DEEPEN WELL							3	3. FIELD OR WILDCAT HELPER							
4. TYPE OF \	WELL	Gas V	Vell C	Coalbed	Methane Well:	YES			5	5. UNIT or COMMUNITIZATION AGREEMENT NAME					
6. NAME OF	OPERATOR	KEF	RR-MCGEE C	OIL & GA	AS ONSHORE, L	.P.			7	7. OPERATOR PHONE 720 929-6515					
8. ADDRESS	OF OPERATOR	P.0	O. Box 1737	779, Der	nver, CO, 8021	7			9	9. OPERATOR E-MAIL julie.jacobson@anadarko.com					
	L LEASE NUMBER INDIAN, OR STATE	) -ee		1	11. MINERAL OWNERSHIP FEDERAL INDIAN STATE FEE				1:	12. SURFACE OWNERSHIP FEDERAL INDIAN STATE FEE					
13. NAME O	F SURFACE OWN	ER (if box 12 = 'f		ev Chas	ston				1	14. SURFACE OWNER PHONE (if box 12 = 'fee')					
15. ADDRES	S OF SURFACE O			Big Sprir	ngs, TX 79720				1	16. SURFACE OWNER E-MAIL (if box 12 = 'fee')					
	ALLOTTEE OR TRI	BE NAME			18. INTEND TO COMMINGLE PRODUCTION FROM					19. SLANT					
(if box 12 =	'INDIAN')				YES (Submit Commingling Application) NO					VERTICAL DIRECTIONAL HORIZONTAL					
20. LOCATI	ION OF WELL			FOC	FOOTAGES		QTR-QTR	SECTION		TOWNSHIP		RANGE		MERIDIAN	
LOCATION	AT SURFACE		1	1136 FS	FSL 937 FEL		SESE	22		14.6	S	10.0 E		S	
Top of Upp	permost Producing	g Zone	1	1136 FS	FSL 937 FEL		SESE	22		14.0	S	10.0 E		S	
At Total Depth 1136			1136 FS	FSL 937 FEL SESE		22		14.0 S 10.0 E			S				
21. COUNTY		RBON		2	22. DISTANCE TO NEAREST LEASE LINE (Fact)				2	23. NUMBER OF ACRES IN DRILLING UNIT					
				2	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling of Completed) 250				2	26. PROPOSED DEPTH MD: 1653 TVD: 1653					
27. ELEVATION - GROUND LEVEL					28. BOND NUMBER 22013542					29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE City of Price					
5564 22013542 City of Price  He casing, and Cement Information															
String	Hole Size	Casing Size	e	ngth	Weight	: G	Grade & Thread		Mud V	Nt.	Cement	Sacks	Yield	d Weight	
Cond	17.5	13.375	0		48.0		H-40 ST&C	13.0			No Used	0	0.0		
Surf Prod			- 183 - 1653	24.0	_	J-55 ST&C J-55 ST&C		13.0	-	Type III Type III	73 208	2.04			
1100	7.073		1000	13.3		J-33 51 QC		13.0		Type III	66	1.15			
ATTACHMENTS															
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES															
WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER															
AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)  FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER															
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)  TOPOGRAPHICAL MAP							ИAР								
NAME Lauren Christiansen TITLE I				ITLE Re	Regulatory Anayst PHONE 720 929-6				29-610	5107					
SIGNATURE DATE (				ATE 03	03/29/2012 EMAIL lauren.christ				christia	stiansen@anadarko.com					
API NUMBER ASSIGNED 43007502590000					APPROVAL										

#### Cardinal Draw 2011 Plan of Development Carbon County, Wyoming

OPERATOR: Kerr-McGee Oil & Gas Onshore LP

#### MASTER DRILLING PROGNOSIS PRODUCTION WELLS

#### 1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

	GROUND				
PROPOSED WELL	<u>ELEV</u>	TOP KB	BASE KB	TD KB	<u>COAL</u>
Wellington Federal 44-15	5633	1033	1533	1833	Ferron
Wellington Fee 12-23	5608	1033	1533	1833	Ferron
Wellington Fee 21-26	5537	797	1297	1597	Ferron
Wellington Fee 23-23	5604	974	1474	1774	Ferron
Wellington Fee 42-22	5602	822	1322	1622	Ferron
Wellington Fee 44-22	5564	853	1353	1653	Ferron

#### 2. ESTIMATED DEPTH OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS

Primary Objective:

Several coal seams may be tested for gas producing formations to total depth. All shallow water zones will be protected with casing and cement. Cement will be brought to surface to isolate formations

The casing and cementing programs shall be conducted as approved to protect and/o water zones and any prospectively valuable deposits of minerals. All indications of be reported to the authorized officer prior to running the next string of case plugging orders are requested, whichever occurs first.

#### 3. MINIMUM BOP REQUIREMENTS: (Refer to attached

- a) The BOPE shall be closed whenever the we
- b) The BOPE shall be pressure tested when initially installed, whenever any seal subject to pressure testing is broken, after repairs,
- c) Kerr-McGee shall notify the UDOG 1-Plice office 24 hours prior to the BOPE test.
- d) All BOPE shall meet or pace at the requirements of a **2M** system as set form in Change Call 1.

  e) An accumulator wat will be used that has sufficient capacity to open the hydraulically-controlled choke

(it so equipped), close all rams plus the annular preventer and retain 200 psi above precharge on ing manifold without the use of the closing pumps. The accumulator unit will be located at the ster accumulator and on the rig floor.

- pe preventers shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.
- g) Accessories to BOP's include upper and lower Kelly cock valves with handles and floor safety valve, drill string BOP.

#### 4. SUPPLEMENTARY INFORMATION:

The primary objective of this project is to drill, stimulate and produce coalbed methane gas from the coal seams of the Mesa Verde Group Formations.

Kerr-McGee proposes to test the coal formations.

Stimulation of the perforated coal seams will be done by hydraulic fracturing. Fresh water, gelled water, and/or foam fracturing techniques will be used.

#### 5. CASING PROGRAM:

Hole Size	Casing Size	Weight	Grade	Joint	Depth Set	New/Used	Collapse	Burst
17 1/2"	13 3/8"	48	H-40	ST&C	0-35'	New	740	1730
11"	8 5/8"	24	J-55	ST&C	0-151 to 183'	New	1370	2950
7 7/8"	5 1/2"	15.5	J-55	ST&C	0-TD	New	4040	4810

#### Surface Casing:

```
a) Burst = 0.052 * MW * TVD(shoe)
              = 0.052 * 10.0 ppg * 375'
              = 195 psi
      Safety Factor = Rating/Burst
              = 2950/195
              = 15.1
b) Collapse = [0.052 * MW * TVD(shoe)] - [Gas Gradient * TVD]
              = [.052 * 10.0 ppg *375'] - [0.1 * 375']
              = 158 psi
      Safety Factor = Rating/Collapse
              = 1370/158
              = 8.7
c) Tension = Weight * TVD * [1 - (MW/65.5ppq)]
              = 24 * 375' * [1 - 10.0/65.5]
              = 7,626 lbs.
      Safety Factor = Rating/Tension
              = 244,000/7,626
```

Surface casing shall have centralizers on the bottom 3 joints of the casing, starting with the shot joint. (minimum of 4 centralizers.)

Production Casing:

Burst = 0.052 \* 13 ppg \* 3345'
= 2261 psi
Safety Factor = Rating/Burst
= 4810/2261
= 2.1

```
a) Burst = 0.052 * 13 ppg * 3345'
```

```
= 15.5 lbs/ft * 3345'* [1-(13 ppg/65.5 ppg)]
     =41,557 lbs
fety Factor = Rating/Tension
    = 202,000/41,557
    =4.9
```

#### 6. MUD PROGRAM:

Kerr-McGee intends to drill the surface casing setting depth using air. Therefore, Kerr-McGee requests a variance from Onshore Order 2 in regards to the 100 foot blooie line. When drilling the surface hole no gas will be encountered and a BOP system will not be used. The length of the blooie line will be sufficient to reach the middle of the reserve pit. Since no gas will be encountered we will not have an ignition device. In the event that gas is encountered, then a continuous ignition system will be installed and utilized on remaining and subsequent wells drilled.

Air flow line is 6" Schedule 80 pipe that runs 90 degrees from the well bore to the reserve pit. The last 7' of flow line is 14" pipe with three, 45 degree, 8" Schedule 80 pipe to disperse cuttings to reserve pit. Dust supression system is used by water injection to flow line. There is no gas ignition in place.

Location and capacity of equipment is located on site map provided and made an attachment to this plan. Kerr-McGee will use whip checks on all compressor equipment and hoses. There are several fire extinguishers placed on all equipment as well as up to date safety training and paper work.

While drilling with air, Kerr-McGee will maintain sufficient mud and weight materials to kill the water flow or contain gas production if necessary. These materials will not be pre-mixed, but the ability to mix and pump will be on location.

Should water be used to drill through the surface casing setting depth, only fresh water will be used from the source listed in the MSUP.

Drilling of through production casing setting depth will be done with drilling mud as the circulation medium. A fresh water, polymer, gel drilling mud will be used and visual monitoring will be done upon mudding up to total depth. The anticipated mud weight will be between 8.5 - 13 ppg. Sufficient quantities of lost circulation material and barite will be available at the well site at all times for the purpose of assuring well control.

A mud test shall be performed at least once every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

#### 7. CEMENTING PROGRAM:

The following is the proposed procedure for cementing the 8 5/8" surface pipe and 5 1/2" long string:

#### 8 5/8" Surface Casing:

Lead: Type III Cement with 0.25#/sk celloflake and 2% CaCl2, mixed at 15.8 ppg, 1.15 cuft/sk yield with 100% exce

The surface casing shall be cemented back to surface. In the event cement does not circulate to surface of fall back of the cement column occurs, remedial cementing shall be done to cement the casing lack to surface.

#### 5 1/2" Production Casing:

Lead: Type III Cement with 2% CaCl2, 0.2% CFR, 0.3% CFL-3 and 5#/8 cell -flate, mixed at 12.5 ppg, 2.04 cuft/sk yield.

Tail: Type III with 2% CaCl2, 0.2% CFR, 0.3% CFL-3 and .3 sk cello-flake, mixed at 15.8 ppg, 1.15 cuft/sk yield.

Volumes calculated to circulate cement from TD to surface.

#### 8. LOGGING PROGRAM

Well completion and stimulation procedures will be determined following the evaluation of the drilling results and open hor logs. A Sundry Notice will be submitted for approval outlining the planned completion procedure at that time.

ores: None

DSTs: None

Logs:

	PIOIII	10
GR	TD	Surface
Resistivity	TD	Surface Casing
Neutron-Density-Cal	TD	Surface Casing
High Res Pass	TBD	TBD

From

 $T_{\alpha}$ 

#### 9. PRESSURE DATA, POTENTIAL HAZARDS

Bottom hole pressures anticipated at 800-1000 psi

There is no history of hydrogen sulfide gas in the area and none is anticipated.

#### 10. ANTICIPATED STARTING DATES AND NOTIFICATION OF OPERATIONS:

a) Anticipated Days:

Drilling Days: Approximately 4 Days/Well
Completion Days: Approximately 2 Days/Well
Testing Days: Approximately 7-14 Days/Well

#### b) Notification of Operations:

Main Address:

Bureau of Land Management Price Field Office 125 South 600 West Price, UT 84501

Main: 435-636-3600 Fax: 435-636-3657

#### Main Address:

Utah Division of Oil, Gas, and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84116

Main: 801-538-5340 Fax: 801-359-3940

#### Mailing Address:

Utah Division of Oil, Gas, and Mining PO Box 145801 Salt Lake City, UT 84114-5801

Returned Unapproved

**CARBON COUNTY, UTAH** 

FILE NAME: 11-41

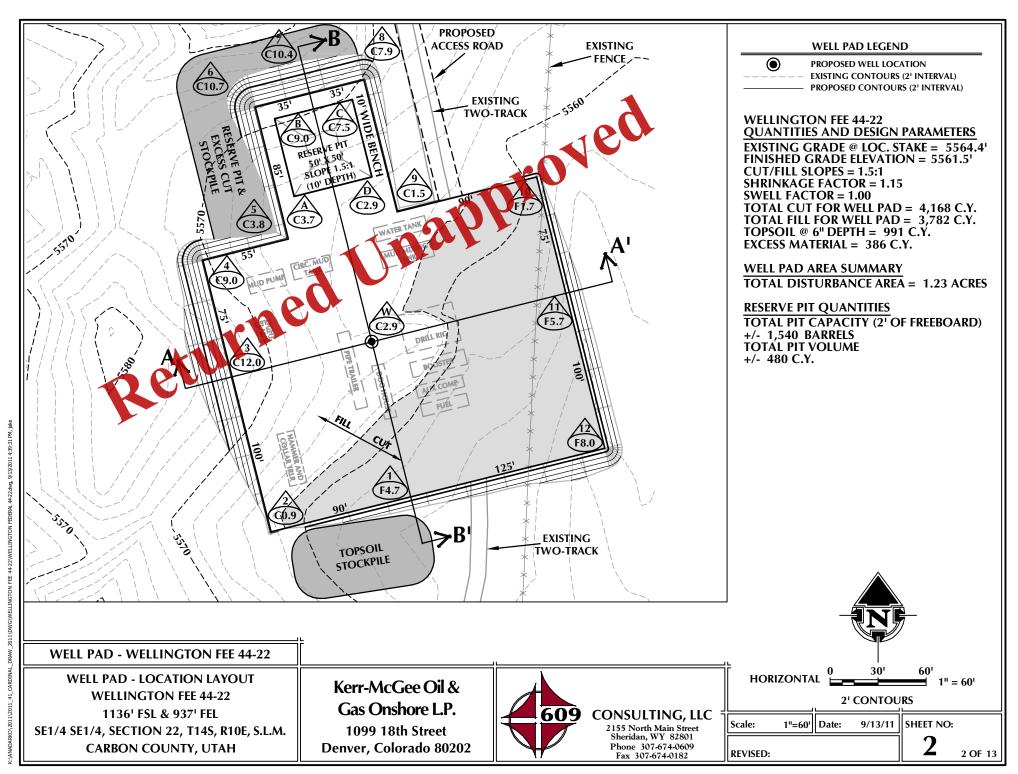
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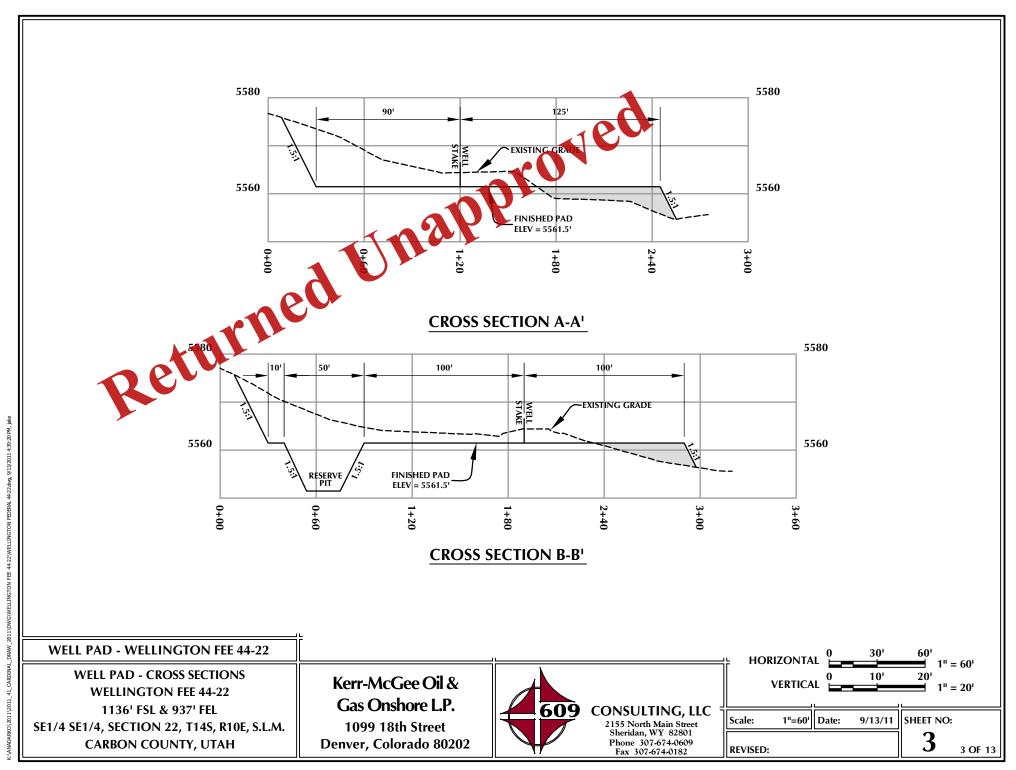
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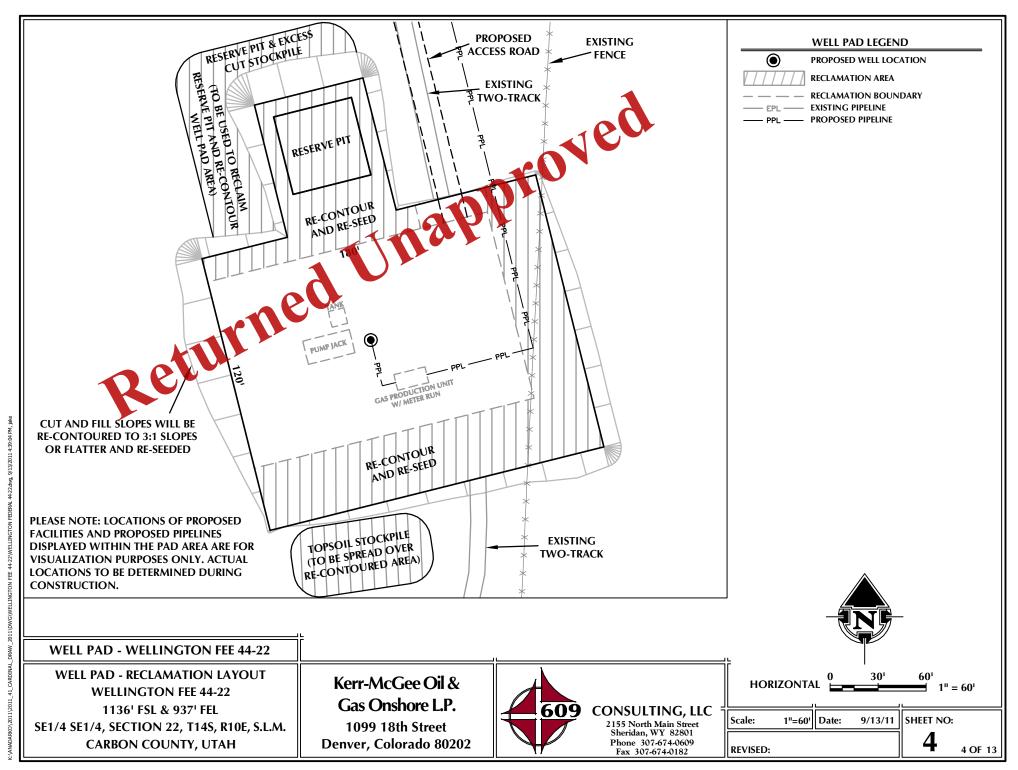
DATE DRAFTED: 9/13/11

12/29/11

REVISED:











PHOTOGRAPH OF WELLINGTON FEE 44-22 WELL LOCATION - CAMERA ANGLE EAST

#### **WELL PAD - WELLINGTON FEE 44-22**

**LOCATION PHOTOGRAPHS WELLINGTON FEE 44-22** 1136' FSL & 937' FEL SE1/4 SE1/4, SECTION 22, T14S, R10E, S.L.M. **CARBON COUNTY, UTAH** 

Kerr-McGee Oil & Gas Onshore L.P.

**1099 18th Street** Denver, Colorado 80202



REVISED:

CONSULTING, LLC

2155 North Main Street Sheridan, Wyoming 82801 Phone 307-674-0609 Fax 307-674-0182

SCALE: NTS DATE: 9/13/11

SHEET NO: 5

5 OF 13





PHOTOGRAPH OF WELLINGTON FEE 44-22 WELL LOCATION - CAMERA ANGLE WEST

#### **WELL PAD - WELLINGTON FEE 44-22**

**LOCATION PHOTOGRAPHS WELLINGTON FEE 44-22** 1136' FSL & 937' FEL SE1/4 SE1/4, SECTION 22, T14S, R10E, S.L.M. **CARBON COUNTY, UTAH** 

# Kerr-McGee Oil & Gas Onshore L.P.

1099 18th Street Denver, Colorado 80202



### CONSULTING, LLC

2155 North Main Street Sheridan, Wyoming 82801 Phone 307-674-0609 Fax 307-674-0182

SCALE: NTS DATE:

REVISED:

9/13/11

SHEET NO: 6

6 OF 13



PHOTOGRAPH OF PROPOSED ACCESS TO THE WELLINGTON FEE 44-22 WELL LOCATION - CAMERA ANGLE SOUTH

#### **WELL PAD - WELLINGTON FEE 44-22**

LOCATION PHOTOGRAPHS
WELLINGTON FEE 44-22
1136¹ FSL & 937¹ FEL
SE1/4 SE1/4, SECTION 22, T14S, R10E, S.L.M.
CARBON COUNTY, UTAH

# Kerr-McGee Oil & Gas Onshore L.P.

1099 18th Street Denver, Colorado 80202



CONSULTING, LLC

2155 North Main Street Sheridan, Wyoming 82801 Phone 307-674-0609 Fax 307-674-0182

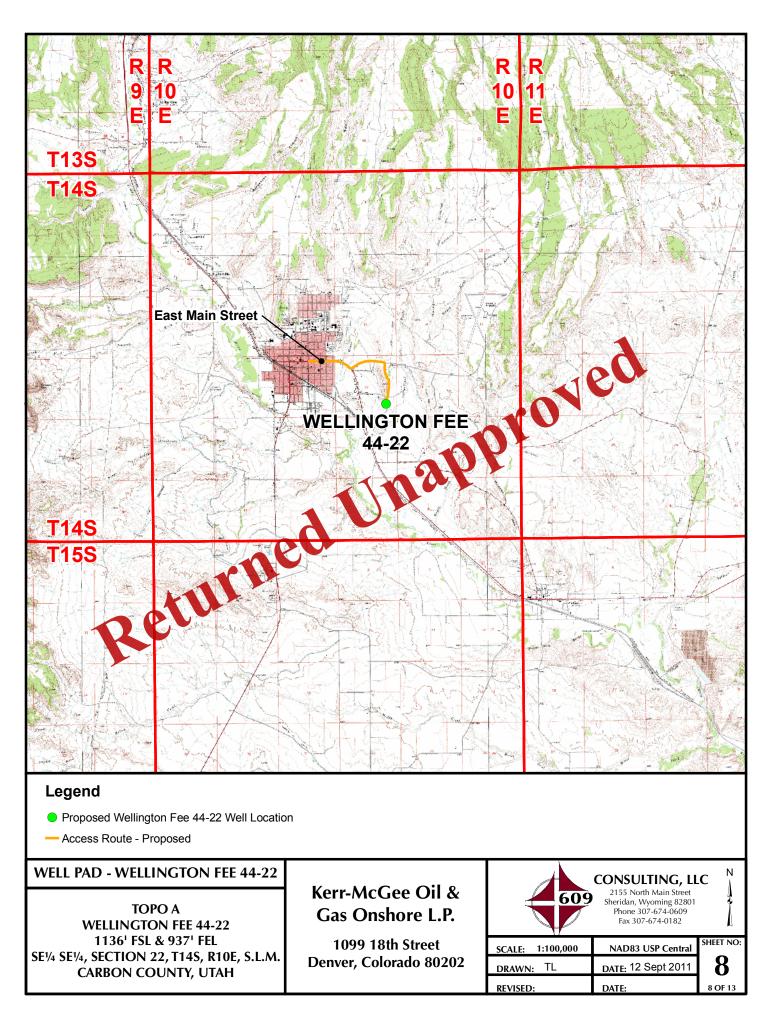
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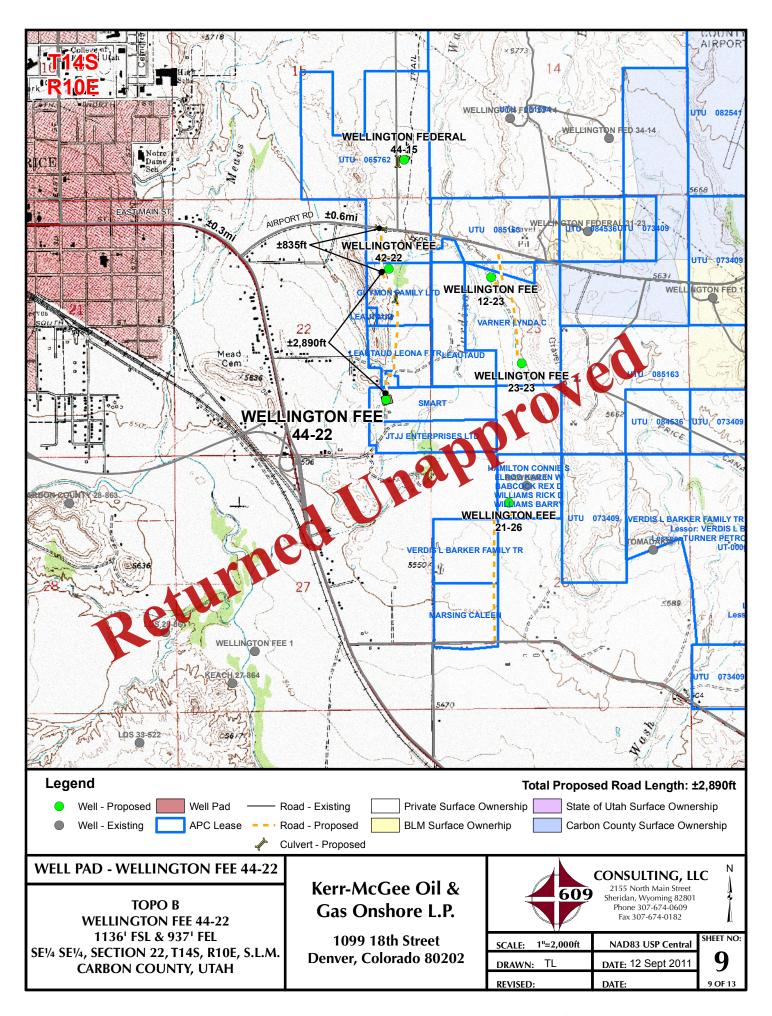
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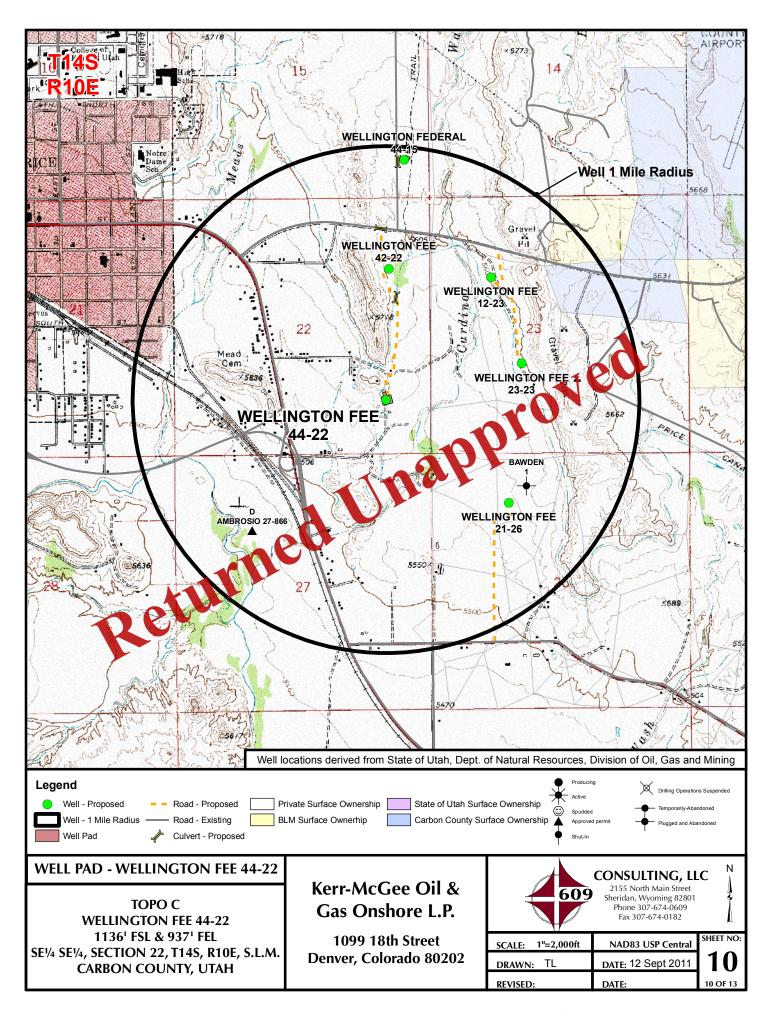
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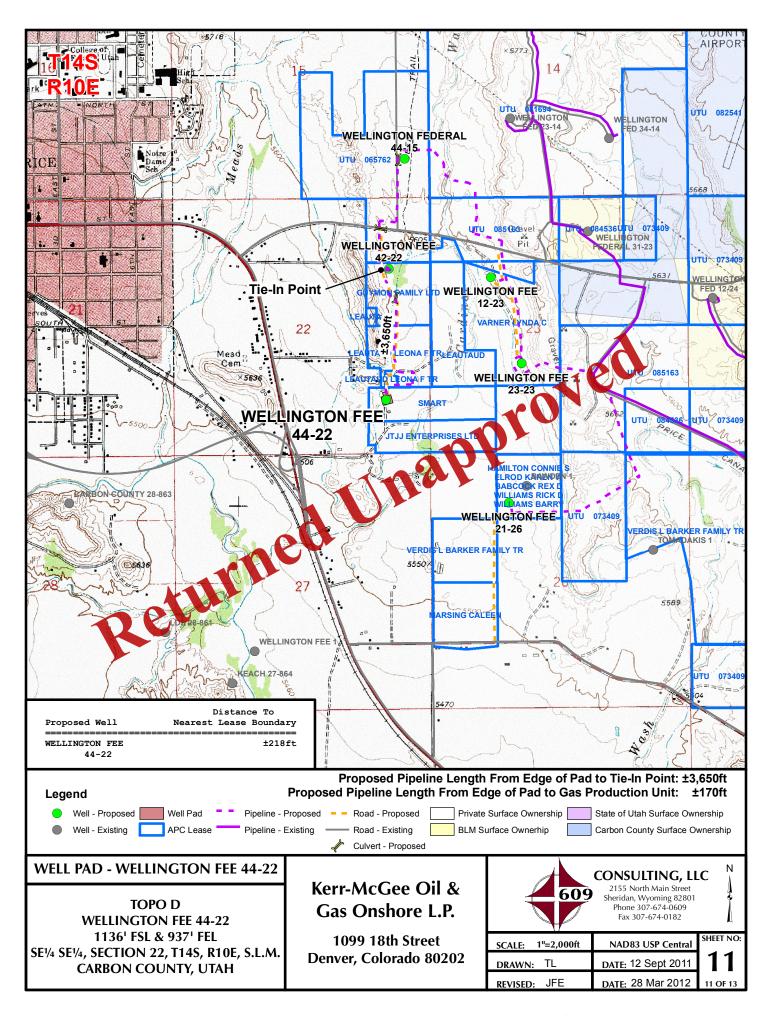
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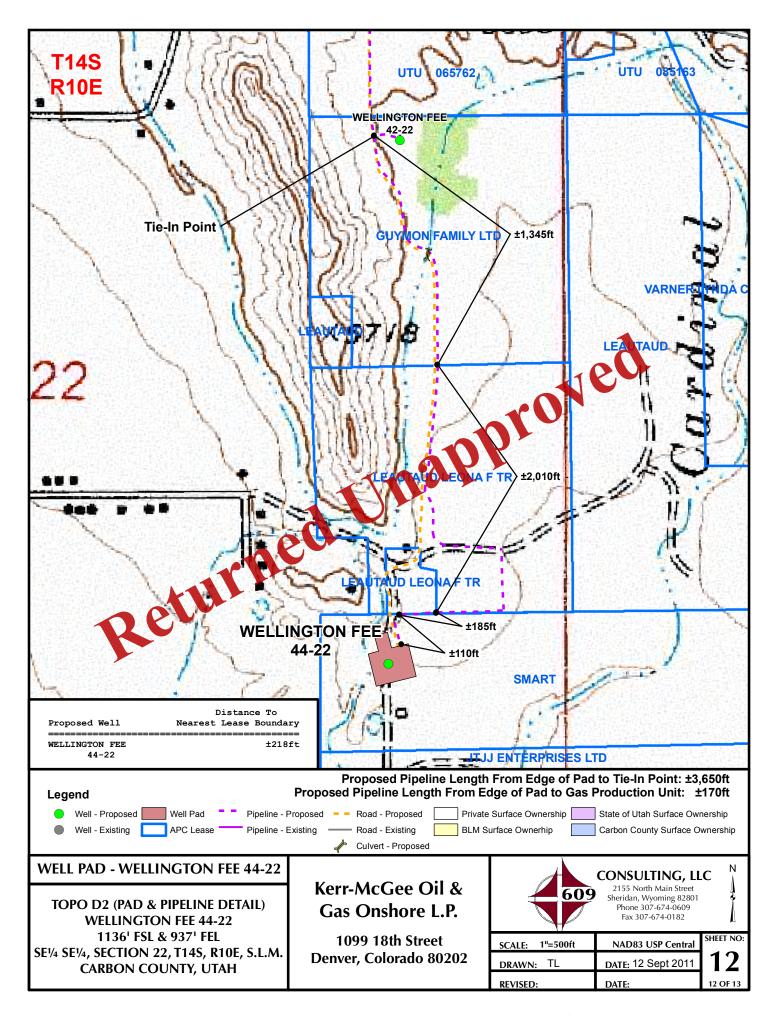
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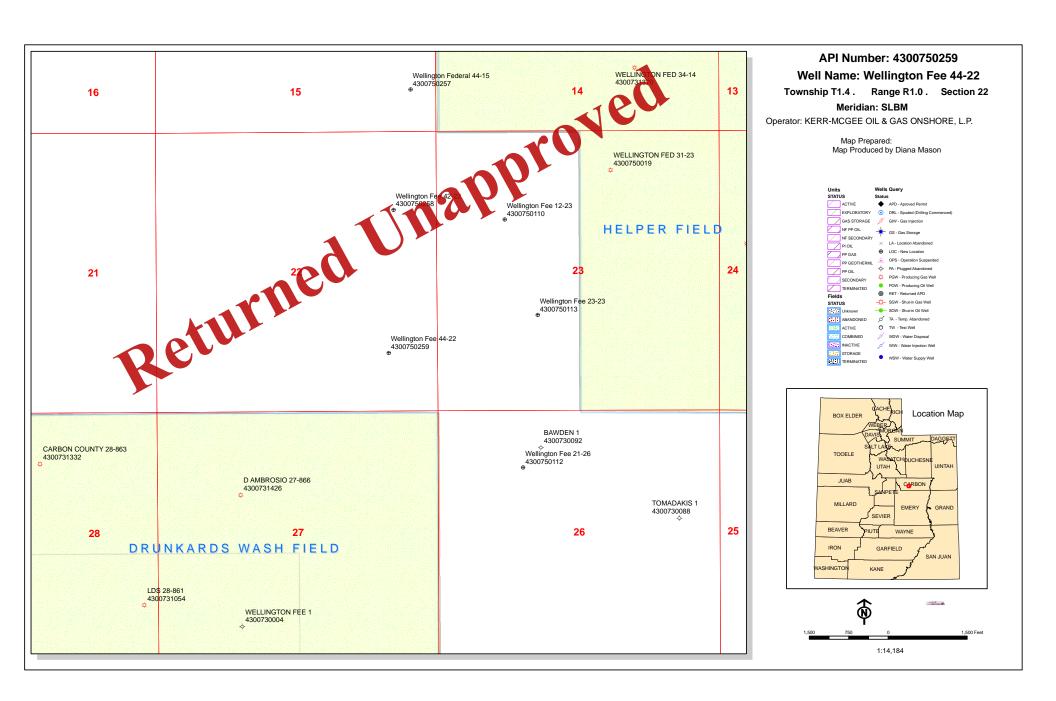


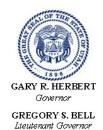
# KERR-MCGEE OIL & GAS ONSHORE L.P. WELLINGTON FEE 44-22 SECTION 22, T14S, R10E, S.L.M. CARBON COUNTY, UTAH

Beginning at the intersection of South 7<sup>th</sup> East Street and East Main Street in Price, Utah proceed in a southeasterly direction along East Main Street approximately 0.3 miles to the junction of East Main Street and Airport Road. Exit left and proceed in a northeasterly, then easterly direction along Airport Road approximately 0.6 miles to the proposed access road to the south. Exit right and follow the road flags in a southerly direction approximately 835 feet to the proposed Wellington Fee 42-22 well location. Continue to follow road flags in a southerly direction approximately 2,905 feet to the proposed well location.

Total distance from Price, Utah to the proposed Wellington Fee 44-22 Welf location is approximately 1.6 miles.

SHEET 13 OF 13





# State of Utah

#### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

June 12, 2013

KERR-MCGEE OIL & GAS ONSHORE, L.P. P.O. Box 173779 Denver, CO 80217

Re: Application for Permit to Drill - CARBON County, Utah

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the Wellington Fee 44-22 well, API 43007502590000 that was submitted March 29, 2012 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

Should you have any questions regarding this matter, please call me at (801) 538-5312.

Sincerely,

Diana Mason Environmental Scientist

Enclosure

cc: Bureau of Land Management, Vernal, Utah

